

**REMARKS**

Claims 1-66 are pending in the application.

Claims 1-66 have been rejected.

**Rejection of Claims under 35 U.S.C. § 103(a)**

Claims 1-66 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication 2003/0163593 issued to Knightly ("Knightly") in view of U.S. Patent 7,102,997 issued to Sultan ("Sultan"). Applicants respectfully traverse this rejection.

**Claims 1, 46, and 54:**

Claims 1, 46, and 54 contain substantially the following:

receiving information indicating a need to change an amount of data being transmitted through a first media access control (MAC) device to a client of the first MAC device, wherein  
the information is received from the client when the client determines that the client is receiving data at a rate exceeding a set threshold;  
forming a message including an indication to a second MAC device to change a rate at which the second MAC device transmits data, wherein  
said forming the message uses the information indicating the need to change the amount of data being transmitted to the client; and  
transmitting the message to the second MAC device over a network

*See, e.g.,* claim 1. Applicants respectfully submit that neither Knightly nor Sultan, alone or in permissible combination, teaches each claimed feature.

The Office Action itself states that Knightly does not disclose that "the client determines that the client is receiving data at a rate exceeding a set threshold," a proposition with which Applicants agree. The Office Action relies on Sultan as purportedly providing this missing disclosure. Office Action, p.3. However, Applicants respectfully submit that Sultan does not disclose determining that a client receives data at a rate exceeding a set threshold. This is unsurprising since Sultan is directed towards

“allocating respective proportions of data transmission capacity of the ring to different closed user groups (CUGs), each including a plurality of LAN clients.” Sultan, Abstract.

Allocating transmission bandwidth fairly is not the same as determining that a client is receiving data at a rate exceeding a set threshold. One can easily imagine an example in which it is determined that a group is transmitting more than its allocated share, and is thus depriving other CUGs access to transmit, yet there is no determination that any client in the network is being overloaded. In fact, the only determination Sultan discloses concerns the aggregate transmission rate of a closed user group (CUG), not the reception rate of a MAC client.

Sultan discloses purportedly using CUGs to reduce the complexity of LAN setup by specifically avoiding the need to configure individual clients. *See* Sultan 1:58-67. Applicants, on the other hand, disclose making a determination about a single client’s acceptable rate of reception. Further, the transmission rate discussed in Sultan is an aggregate rate across a CUG.

The cited sections of Sultan do not even disclose the capability of determining a transmission rate on a per client basis, much less a reception rate. *See, e.g.*, Sultan 2:4-9, which reads:

The aggregate rate for a CUG reflects an expected overall traffic demand. For example, if a CUG includes ten sources each expected to generate 100 Kb/s traffic on average, a reasonable aggregate rate specification for the CUG might be 1000 Kb/s. There is no need to further specify data rates among the individual members of the CUG nor to implement point to point connectivity.

The cited section of Sultan discloses purportedly monitoring and controlling the aggregate rate at which a CUG transmits data. The passage the Office Action cites as purportedly teaching the claimed feature, “the client determines that the client is receiving data at a rate exceeding a set threshold” reads:

When the threshold 22 is exceeded, the RPR node 12 sends a “throttle” message to a selected CUG member indicating that the CUG member should reduce its rate of transmission into the network 10, as described above with reference to FIG. 2.

Sultan 5:1-5. The threshold referred to in the cited section is the maximum allowable rate of transmission into the network by a CUG. *See, e.g.*, Sultan 3:51-53 (“Therefore the network 10 employs the concept of a per CUG aggregate rate, or a total amount of transmission bandwidth available to all users of a CUG.”). Selection of the user in the CUG to which to send the throttle message is done using a table of “most active sources.” Sultan 5:20-23. The cited passage discloses purportedly determining that a group of clients is transmitting at an aggregate rate exceeding the network bandwidth threshold allocated to the group. Determining that a group is transmitting at too great a rate is not the same as determining that a client is receiving at too great a rate. Therefore, Applicants respectfully submit that Sultan does not cure the deficiencies of Knightly and that the suggested combination does not teach each limitation of claims 1, 46, and 54.

For at least these reasons, Applicants submit that the suggested combination of Knightly and Sultan fails to provide disclosure of all the limitations of independent claims 1, 46 and 54, and all claims depending therefrom, and that these claims are in condition for allowance. Applicants therefore respectfully request the Examiner’s reconsideration and withdrawal of the rejections to these claims and an indication of the allowability of same.

#### **Claims 18 and 35:**

Claims 18 and 35 contain substantially the following:

- a first media access control (MAC) device operable to be coupled to a network, the first MAC device including control logic configured to prepare a message for transmission on the network including an indication to change a rate at which another MAC device transmits data; and
- a MAC client coupled to the first MAC device, wherein the MAC client comprises
  - a buffer for storing data transmitted to the MAC client and
  - buffer control circuitry configured to provide information about an amount of data stored in the buffer, wherein
    - the control logic is responsive to the information about the amount of data stored in the buffer to prepare the message.

*See, e.g.*, claim 18. Applicants respectfully submit that neither Knightly nor Sultan, alone or in permissible combination, discloses each claimed feature. The Office Action itself states that Knightly does not teach the claimed feature that “the MAC client comprises a buffer for storing data transmitted to the MAC client,” as recited in claims 18 and 35.

Applicants agree. The Office Action relies upon the following section of Sultan as purportedly providing this missing disclosure:

In addition to providing for logical separation of the traffic from different CUGs 18, the RPR nodes 12 provide other services on a per-CUG basis. In particular, the RPR nodes 12 perform functions pertaining to CUG-specific service level agreements (SLAs) that specify the nature of CUG traffic and the type of service to be provided by the network 10.

Sultan 3:19-24. Applicants respectfully submit that the cited passage fails to disclose a client comprising a buffer for storing data transmitted to the client. In fact, the cited passage doesn’t mention a buffer at all. It appears that the Office Action is attempting to equate provision of services on a per CUG basis to providing a client comprising a buffer for storing data transmitted to the client. Office Action, p.4 (“Sultan teaches a system where there is included buffers on a per client basis that are monitored and used for sending throttle messages”). Applicants respectfully submit that the two are not comparable. Sultan discloses bandwidth allocation services, or enforcement of an aggregate rate. Sultan 3:25-35. As already discussed, this simply means that each CUG is restricted to transmission of data at a certain rate. The cited sections provide no disclosure of a buffer for incoming data, much less one with the specific characteristics recited in claims 18 and 35.

For at least these reasons, Applicants submit that the suggested combination of Knightly and Sultan fails to provide disclosure of all the limitations of independent Claims 18 and 35, and all claims depending therefrom, and that these claims are in condition for allowance. Applicants therefore respectfully request the Examiner’s reconsideration and withdrawal of the rejections to these claims and an indication of the allowability of same.

*Response to Remarks*

The Office Action includes remarks which state that Applicant is attempting to indicate that the buffer is physically located with the MAC client. Office Action, p.9. To the contrary, Applicants are attempting to indicate that the buffer is exclusive to the MAC client. It is not the physical location that matters, but that the buffer contains data transmitted to that MAC client, as opposed to buffers which may contain data not transmitted to that client. Applicants respectfully submit that the cited references do not disclose a buffer for storing data transmitted to a MAC client coupled to a given MAC device, but instead disclose transit buffers (which may contain traffic not transmitted to the MAC client coupled to the given MAC device) and buffers for storing data transmitted by the MAC client. Clearly traffic not transmitted to the MAC client and traffic transmitted by the MAC client are not the same as traffic transmitted to the MAC client.

**CONCLUSION**

In view of the amendments and remarks set forth herein, the application and the claims therein are believed to be in condition for allowance without any further examination and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is invited to telephone the undersigned at 512-439-5092.

If any extensions of time under 37 C.F.R. § 1.136(a) are required in order for this submission to be considered timely, Applicant hereby petitions for such extensions. Applicant also hereby authorizes that any fees due for such extensions or any other fee associated with this submission, as specified in 37 C.F.R. § 1.16 or § 1.17, be charged to deposit account 502306.

Respectfully submitted,



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